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OUR WATER SUPPLY.

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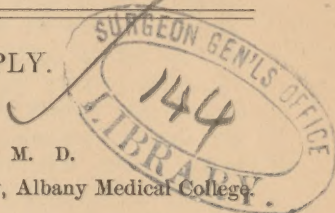
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The publication in the last and present numbers of the MEDICAL ANNALS of the discussion in the society upon the resolution of the common council regarding the advisability of adopting the Hudson River water as a source of city supply, recalls a subject of great interest, both to the profession and the general public. Although the weight of scientific opinion was decidedly against its introduction, little, if any, attention was paid by the authorities to the opinions which had been solicited, and a source of water supply was adopted which met with almost universal condemnation. That this statement is no exaggeration may be seen by a perusal of the proceedings and transactions of the Albany Institute, in which the minutes of those meetings held in '72 and '73, to consider the matter, are contained; and of the minutes of the special meetings held by our own society, which are now presented to the readers of this journal.

Notwithstanding, however, the protests from most of the leading physicians, experts and chemists of Albany, the river water was introduced, and has since constituted our main source of supply.

Now it may be said by those who advocate the use of this water, that since its introduction the city has been as healthy as heretofore, and that we have suffered from no epidemic of zymotic diseases, nor outbreak of other affections directly traceable to its use. This may be so, and yet the fact remain that we are at any time liable to such an outbreak, and that the water with which we are supplied may at any moment become







the vehicle for conveying disease. Nothing is surer than this, and though the river water may be clearer than that previously supplied, and freer from bad odor and taste, it may yet, and does, contain more organic matter, more nitrites, nitrates, chlorides and ammoniacal salts, resulting from the decomposition of sewage matter. These substances in themselves are not necessarily highly injurious, but they are yet objectionable, and show the possibility of the presence of disease germs, incapable of detection, but capable of imparting disease, more especially in the event of a decided outbreak of any of the zymotics in any part of the neighboring region draining into the Hudson River.

It needs constantly to be borne in mind that there can be no greater fallacy than to judge of the quality of a water from its color and sensible properties alone. The air in a certain locality may be filled with smoke, dust, or vapor, unpleasant alike to the eye and to the sense of smell, and yet be quite harmless, though disagreeable; while in another locality, the air may be clear, colorless and unobjectionable to the senses, although loaded with the germs of disease. So with water: one sample may be turbid and disagreeable from the presence of clayey or vegetable matter in solution or suspension, and yet be quite innocuous; while another may be clear, bright and sparkling, and yet loaded with chemical impurities and disease germs. There seems no longer to be a doubt that the specific poison of typhoid fever and similar diseases exists in the excreta of the sick, and may pass into, and contaminate drinking water, even if greatly diluted, rendering such water a fruitful source of contagion. Disease germs, let it be repeated, may be present in water which seems clear and wholesome, for they are as invisible, and as incapable of detection by chemical analysis, as the viewless contagion floating in the atmosphere of a room inhabited by a small-pox patient. They cannot be removed by any known process of filtration, and can scarcely be destroyed but by lengthy exposure to the air or to a temperature sufficiently high.

These facts are indisputable, and it is greatly to be regretted that, at a time when river waters are being almost everywhere abandoned as unfit sources of supply for cities, except in certain highly exceptional instances, our city should be supplied from a stream that receives the drainage of nearly two hundred thousand people, and which will, year after year, become more and more unfit for use; and our Society has acted wisely in that it has put itself on record as having been opposed to the plan from its very inception.

In conclusion, if it should be urged that the Hudson River afforded the only obtainable supply for our city, it may be added that competent engineers proposed various plans for increasing the existing sources of supply, as well as for obtaining a supply from other localities.

